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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,752	04/24/2001	Sorin Surdila	1000-0216	6405

27902 7590 06/30/2005

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EXAMINER	
NGUYEN, PHUONGCHAU BA	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/841,752	SURDILA ET AL.	
	Examiner	Art Unit	
	Phuongchau Ba Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-11* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Information Disclosure Statement

1. The information disclosure statement filed 4-24-1 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered. For example, the PTO-1449 is not found in the original disclosure.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-4, 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Teitelbaum (Outline of Bbroker Architecture).

Regarding claim 1:

Teitelbaum (Outline of Bbroker Architecture) discloses Qbone Bandwidth Broker Architecture, *a method of ensuring a requested Quality of Service (QoS)* (RAR-Resource Allocation Request, see page 8) *for a media flow that is routed from a first terminal* (end system, see the figure in page 13) *in an originating network* (source domain, see the figure in page 13), *through at least one transit network* (transit domain, see the figure in page 13), *to a second terminal* (end system) *in a terminating network* (sink domain), *said originating network* (source domain) *including an Originating Bandwidth Broker (BB-O)* (bandwidth broker) *and an Originating Media Policy Server (MPS-O)* (policy of the source domain-not shown, see step e in page 13), *said transit network* (sink domain) *including a Transit Bandwidth Broker (BB-T)* (bandwidth broker) *and a Transit Media Policy Server (MPS-T)* (policy of the transit domain-not shown, see step f in page 14), *and said terminating network* (sink domain) *including a Serving Bandwidth Broker (BB-S)* (bandwidth broker) *and a Serving Media Policy Server (MPS-S)* (policy of the sink domain-not shown, see step d in page 14), *said method comprising the steps of:*

sending an origination message (RAR) *from the originating network* (source domain, see the figure in page 13) *to the terminating network* (sink domain) *with a proposed session description that identifies the requested QoS* (see lines 2-4, page 13);

determining by the terminating network (the bandwidth broker in the destination/sink domain) *that the session description is agreeable* (see behavior of bandwidth broker in destination domain, step d, page 14);

sending a first Bandwidth Broker Protocol Resource Allocation Request (RAR) from the BB-S to the BB-T with binding information that identifies the first and second terminals and the requested QoS (see lines 31-40, page 14);

determining by the BB-T whether a Service Level Agreement (SLA) between the transit network and the terminating network allows sufficient resources to be allocated to meet the requested QoS (see lines 1-7, page 15);

sending a second RAR from the BB-T the BB-O with the binding information, upon determining by the BB-T that the SLA between the transit network and the terminating network allows sufficient resources to be allocated to meet the requested QoS (see lines 1-7, page 15);

reserving the resources required meet the requested QoS in the originating network, the transit network, and the terminating network (see lines 8-13, page 15); *and*

setting up a multimedia session to carry the media flow with the requested QoS (see lines 14-17).

Regarding claim 2:

Teitelbaum discloses sending a first Resource Allocation Answer (RAA) from the BB-O to the BB-T (see line 13, page 13 to line 11, page 14); sending a second RAA from the BB-T to the BB-S (see lines 12-15, page 14); and installing by the BB-O, the BB-T, and the BB-S, applicable policies in edge routers to provide the requested QOS in the originating network, the transit network, and the terminating network, respectively (see routers in the figure on page 13).

Regarding claim 3:

Teitelbaum discloses sending a QoS reservation request (RAR) that includes the agreed session description and the binding information from an Originating Call State Control Function (Originating P-CSCF) to the BB-O (see lines 1-12, page 13); determining by the BB-O whether a previous valid resource reservation exists for the session associated with the binding information (see lines 9-12, page 13); and sending an immediate successful reservation response from the BB-O to the Originating P-CSCF, upon determining that a previous valid resource reservation exists for the session associated with the binding information (see lines 13-15, page 13).

Regarding claim 4:

Teitelbaum discloses reserving resources required for the requested QoS, upon determining that a previous valid resource reservation does not exist for the session associated with the binding information (see lines 9-12 & 16-17, page 13).

Regarding claim 6:

Teitelbaum discloses wherein the step of sending the QOS reservation request (RAR) from the Originating P-CSCF to the BB-O includes sending the QoS reservation request utilizing a Common Open Policy Service (COPS) protocol and a Bandwidth Broker protocol (see lines 1-12, page 13).

Regarding claim 7:

Teitelbaum discloses creating the binding information from a source Internet Protocol (IP) address of the first terminal, an identification of a Real Time Protocol (RTP) port assigned by the first terminal, a destination IP address of the second terminal, and an identification of an RTP port assigned by the second terminal (see lines 1-12, page 13).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teitelbaum (Outline of Bbroker Architecture) in view of Donovan (6,366,577).

Regarding claim 8:

Teitelbaum discloses a Multimedia Control Server (MMCS) in a multi-service core network for ensuring a requested Quality of service (QoS) for a media flow being routed from a first terminal (source terminal at source domain, see figure on page 13) in the core network (source domain) to a second terminal (end terminal at sink domain, see figure on page 13) in a terminating network (sink domain), said MMCS comprising:

an Originating Call State Control Function (Originating P-CSCF) that serves the first terminal (the function for sending RAR from send system to bandwidth broker via (1), see the figure on page 13, lines 2-4 of page 13);

an Originating Bandwidth Broker (BB-O) that manages resources in the originating network (Bandwidth Broker in source domain, the figure in page 13);

a first interface (1) between the Originating P-CSCF and the BB-O for passing binding information from the Originating P-CSCF to the BB-O, the binding information identifying the first and second terminals and the requested QoS (see lines 2-4, page 13);

a third interface (connection lines) between the BB-O and a plurality of edge routers (routers in source domain, transit domain, and sink domain, see the figure in page 13) that route the media flow into and out the originating network, said third interface for passing from BB-O to the edge routers, policy rules applicable to a specific media flow (see lines 11-12, page 13).

Teitelbaum (Qbone Bandwidth Broker Architecture-Work in Progress) discloses all the claimed limitations, except (1) an Originating Media Policy Server (MPS-O) that

provides policy rules regarding allocation of resources in the originating network; (2) a second interface between the MPS-O and the BB-O for passing the policy rules from the MPS-O to the BB-O.

However, in the same field of endeavor, Donovan (6,366,577) discloses an Originating Media Policy Server (MPS-O) 140-fig.1 that provides policy rules regarding allocation of resources in the originating network (see col.5, lines 16-40) (corresponding to (1)); a second interface (COPS-not shown in fig.1) between the MPS-O and the BB-O for passing the policy rules from the MPS-O to the BB-O (col.5, lines 20-24) (corresponding to (2)). Therefore, it would have been obvious to an artisan to apply Donovan's teaching to Teitelbaum's system with the motivation being to provide an acceptable QoS during an IP communication across the Internet.

Regarding claim 9:

Teitelbaum discloses a Multimedia Control Server (MMCS) in a multi-service core network for ensuring a requested Quality of service (QoS) for a media flow from an application on a first terminal that is transported through a network owned by an administration, said media flow being routed through at least one transit network that is not owned by the same administration, to a second terminal in a terminating network, said MMCS comprising:

an Originating Call State Control Function (Originating P-CSCF) that serves the first terminal (the function for sending RAR from send system to bandwidth broker via (1), see the figure on page 13, lines 2-4 of page 13);

an Originating Bandwidth Broker (BB-O) that manages resources in the originating network (Bandwidth Broker in source domain, the figure in page 13);

a first interface (1) between the Originating P-CSCF and the BB-O for passing binding information from the Originating P-CSCF to the BB-O, the binding information identifying the first and second terminals and the requested QoS (see lines 2-4, page 13);

a third interface (connection lines) between the BB-O and a plurality of edge routers (routers in source domain, transit domain, and sink domain, see the figure in page 13) that route the media flow into and out the originating network, said third interface for passing from BB-O to the edge routers, policy rules applicable to a specific media flow (see lines 11-12, page 13); and

a fourth interface (7-see the figure in page 13) between the BB-O and a Transit Bandwidth Broker (BB-T) in the transit network for passing the binding information from the BB-T to the BB-O said binding information having been received by the BB-T from a Serving Bandwidth Broker (BB-S) in the terminating network.

Teitelbaum (Qbone Bandwidth Broker Architecture-Work in Progress) discloses all the claimed limitations, except (1) an Originating Media Policy Server (MPS-O) that provides policy rules regarding allocation of resources in the originating network; (2) a

second interface between the MPS-O and the BB-O for passing the policy rules from the MPS-O to the BB-O.

However, in the same field of endeavor, Donovan (6,366,577) discloses an Originating Media Policy Server (MPS-O) 140-fig.1 that provides policy rules regarding allocation of resources in the originating network (see col.5, lines 16-40) (corresponding to (1)); a second interface (COPS-not shown in fig.1) between the MPS-O and the BB-O for passing the policy rules from the MPS-O to the BB-O (col.5, lines 20-24) (corresponding to (2)). Therefore, it would have been obvious to an artisan to apply Donovan's teaching to Teitelbaum's system with the motivation being to provide an acceptable QoS during an IP communication across the Internet.

Regarding claim 10:

Teitelbaum disclose all the claimed limitations, except (1) a fifth interface between the MPS-O and a clearing house that performs as an Authorization, Authentication, and Accounting (AAA) server.

However, in the same field of endeavor, Donovan discloses a fifth interface (connection between Policy 1 and clearing house-fig.1) between the MPS-O and a clearing house that performs as an Authorization, Authentication, and Accounting (AAA) server (see col.5, line 62-col.6, lines 7) (corresponding to (1)). Therefore, it would have been obvious to apply Donovan's teaching to Teitelbaum's system with the motivation being to provide authorization for QoS, a collector of usage reports, and settlement between service providers.

Regarding claim 11:

Teitelbaum discloses a system for ensuring a requested Quality of Service (QoS) for a media flow belonging to an application and originating in an originating network owned by an administration, said media flow being routed from a first terminal in the originating network through at least one transit network that not owned by the same administration, a second terminal in a terminating network, said system comprising:

a first Multimedia Control Server (MMCS) in the originating network comprising:

an Originating Call State Control Function (Originating P-CSCF) that serves the first terminal (the function for sending RAR from send system to bandwidth broker via (1), see the figure on page 13, lines 2-4 of page 13);

an Originating Bandwidth Broker (BB-O) that manages resources in the originating network (Bandwidth Broker in source domain, the figure in page 13);

a first interface (1-figure in page 13) between the Originating P-CSCF and the BB-O for passing a session description and binding information from the Originating P-CSCF to the BB-O, the binding information identifying the first and second terminals and the requested QoS (see lines 2-4, page 13);

a plurality of originating edge routers (router at source domain) that route the media flow into and out of the originating network;

a third interface (connection lines) between the originating edge routers (routers in source domain, transit domain, and sink domain, see the figure in page 13) and the

BB-O for passing policy rules applicable to specific media flows from the BB-O to the originating edge routers (see lines 11-12, page 13);

a second MMCS in the terminating network comprising:

a Serving Call State Control Function (Terminating P-CSCF) that serves the second terminal (the function for sending RAR from send system to bandwidth broker via (1), see the figure on page 14, lines 32-37 of page 14);

a Serving Bandwidth Broker (BB-S) that manages resources in the terminating network (Bandwidth Broker in sink domain, the figure in page 13);

a fourth interface (5-figure in page 13) between the Terminating P- CSCF and the BB-S for passing an agreed session description from the Terminating P-CSCF to the BB-S (lines 32-37, page 14);

a plurality of serving edge routers (routers in sink domain-figure on page 13) that route the media flow into and out of the terminating network (sink domain);

a sixth interface (connection) between the serving edge routers (router-figure on page 13) and the BB-S (bandwidth broker-figure on page 13) for passing policy rules applicable to specific media flows from the BB-S to the serving edge routers;

a Transit Bandwidth Broker (BB-T) in the transit network (bandwidth broker in transit domain);

a seventh interface (6-figure on page 13) between the BB-S and the BB-T for passing the binding information from the BB-S to the BB-T in a first Resource Allocation Request (RAR); and

an eighth interface (7-figure on page 13) between the BB-T and the BB-O for passing the binding information from the BB-T to the BB-O in a second RAR.

Teitelbaum (Qbone Bandwidth Broker Architecture-Work in Progress) discloses all the claimed limitations, except (1) an Originating Media Policy Server (MPS-O) that provides policy rules regarding allocation of resources in the originating network; (2) a second interface between the MPS-O and the BB-O for passing the policy rules from the MPS-O to the BB-O; and (3) a Serving Media Policy Server (MPS-S) that provides policy rules regarding allocation of resources in the terminating network; (4) a fifth interface between the MPS-S and the BB-S for passing the policy rules from the MPS-S to the BB-S.

However, in the same field of endeavor, Donovan (6,366,577) discloses an Originating Media Policy Server (MPS-O) 140-fig.1 that provides policy rules regarding allocation of resources in the originating network (see col.5, lines 16-40) (corresponding to (1)); a second interface (COPS-not shown in fig.1) between the MPS-O and the BB-O for passing the policy rules from the MPS-O to the BB-O (col.5, lines 20-24) (corresponding to (2)); and (3) a Serving Media Policy Server (MPS-S) 141-fig.1 that provides policy rules regarding allocation of resources in the terminating network; (4) a fifth interface (COPS-not shown in fig.1) between the MPS-S and the BB-S for passing the policy rules from the MPS-S to the BB-S (col.5, lines 20-24).

Therefore, it would have been obvious to an artisan to apply Donovan's teaching to Teitelbaum's system with the motivation being to provide an acceptable QoS during an IP communication across the Internet.

Allowable Subject Matter

5. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuongchau Ba Nguyen
Examiner
Art Unit 2665

STEVEN NGUYEN
PRIMARY EXAMINER